

ABSTRACT OF THE DISCLOSURE

A speed cooking ovens is disclosed comprising a cooking cavity, thermal heating source, air movement and directing means, air flow control means, an air delivery means, and a vent assembly. The speed cooking oven may additionally utilize air flow control mechanisms and be practiced as a single rack speed cooking oven or a multi rack speed cooking oven. Hot gas is circulated to and from the oven cavity via air delivery means, such that turbulently mixed glancing, conflicting and colliding air flows mix at and about the surfaces of the food product. The turbulently mixed air flows are spatially averaged over the surface area of the food product producing high heat transfer and moisture removal rates, thereby optimizing speed cooking of the food product.